Xylonic acid

Production of xylonic acid by yeast

Photo: Roxana Falcão

Embrapa
Agroenergy

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Raw material	Process	End product
Yeast strains	Fermentative	Xylonic acid

Recombinant yeast strains of *Komagataella phaffii (Pichia pastoris)* and *Saccharomyces cerevisiae* producers of xylonic acid from xylose in sugarcane biomass hydrolysate.

Applications

+ Dispersant in cement, ion complexing or chelating agent, clarifying agent for polyolefins, antibiotic, additive for improving vitamin C absorption.
+ Manufacture of biopesticides and bleaching of textiles.
+ Substitute for gluconic acid in non-food products.
+ Modifier or precursor for the synthesis of 1,2,4-butanetriol, copolyamides, polyester, hydrogels and ethylene glycol.

Advantages

+ Production of xylonic acid from renewable resources.
+ Simplified production process.

Stage ▶ TRL/MRL 3 - Lab scale

Take this technology to another stage

1 Codevelop — Research with us for other potential uses

2 Incubate — Make this technology the basis of your incubated company

+ Information
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